

Amendments To Claims

1. (Currently Amended) A method for exposure control, comprising the steps of:

obtaining a photograph of an image scene for each of a set of possible exposures;

determining a number of clipped pixels in each photograph;

determining a selected exposure from the possible exposures in response to the numbers of clipped pixels such that the photographs obtained using the possible exposures higher than the selected exposure have an increased value for the number and the photographs obtained using the possible exposures less than the selected exposure do not have a substantially lower value for the number.

2. (Previously Presented) The method of claim 1, wherein the step of determining a number of clipped pixels comprises the steps of:

measuring an amplitude of each of a set of pixels in the corresponding photograph;

generating a histogram of a number of the pixels from the corresponding photograph verses the corresponding amplitude;

detecting a jump in the number of pixels at a high pixel amplitude.

3. (Previously Presented) The method of claim 1, wherein the step of determining a number of clipped pixels comprises the steps of:

setting a starting exposure and determining the number of clipped pixels from the corresponding photograph for the starting exposure;

setting a series of increased exposures and

determining the number of clipped pixels from the corresponding photographs for the increased exposures;

setting a series of decreased exposures and determining the number of clipped pixels from the corresponding photographs for the decreased exposures.

4. (Original) The method of claim 1, wherein the step of determining a selected exposure comprises the steps of:

determining a subset of the possible exposures for which the number is relatively unchanged;

determining a first one of the possible exposures higher than the subset for which the number increases.

5. (Currently Amended) An apparatus for exposure control, comprising:

means for obtaining a photograph of an image scene for each of a set of possible exposures;

means for determining a number of clipped pixels in each photograph;

means for determining a selected exposure from the possible exposures in response to the numbers of clipped pixels such that the photographs obtained using the possible exposures higher than the selected exposure have an increased value for the number and the photographs obtained using the possible exposures less than the selected exposure do not have a substantially lower value for the number.

6. (Previously Presented) The apparatus of claim 5, wherein the means for determining a number of clipped pixels comprises:

means for measuring an amplitude of each of a set of pixels in the corresponding photograph;

means for generating a histogram of a number of the

pixels from the corresponding photograph versus the corresponding amplitude;

means for detecting a jump in the number of pixels at a high pixel amplitude.

7. (Previously Presented) The apparatus of claim 5, wherein the means for determining a number of clipped pixels comprises:

means for setting a starting exposure and determining the number of clipped pixels from the corresponding photograph for the starting exposure;

means for setting a series of increased exposures and determining the number of clipped pixels from the corresponding photographs for the increased exposures;

means for setting a series of decreased exposures and determining the number of clipped pixels from the corresponding photographs for the decreased exposures.

8. (Original) The apparatus of claim 5, wherein the means for determining a selected exposure comprises: means for determining a subset of the possible exposures for which the number is relatively unchanged;

means for determining a first one of the possible exposures higher than the subset for which the number increases.

9. (Currently Amended) A digital camera, comprising:  
image sensor;

exposure mechanism that provides a set of possible exposures to the image sensor from an image scene;

image processor that obtains a photograph of an image scene for each of the possible exposures and that determines a number of clipped pixels in each photograph and that determines a selected exposure from the possible exposures in response to the numbers of clipped pixels

such that the photographs obtained using the possible exposures higher than the selected exposure have an increased value for the number and the photographs obtained using the possible exposures less than the selected exposure do not have a substantially lower value for the number.

10. (Previously Presented) The digital camera of claim 9, wherein the image processor determines the number of clipped pixels by using the image sensor to measure an amplitude of each of a set of pixels in the corresponding photograph and then generating a histogram of a number of the pixels from the corresponding photograph verses the corresponding amplitude and then detecting a jump in the number of pixels at a high pixel amplitude.

11. (Previously Presented) The digital camera of claim 9, wherein the image processor determines the number of clipped pixels by setting a starting exposure using the exposure mechanism and then determining the number of clipped pixels from the corresponding photograph for the starting exposure and setting a series of increased exposures and decreased exposures using the exposure mechanism while determining the number of clipped pixels from the corresponding photographs.

12. (Original) The digital camera of claim 9, wherein the image processor determines a selected exposure by determining a subset of the possible exposures for which the number is relatively unchanged and by determining a first one of the possible exposures higher than the subset for which the number increases.